

The Claims

1. An apparatus for harvesting power from a moving liquid or gas, comprising in combination:
 - 5 a central shaft;
 - a structure rotatable about the central shaft; and
 - at least one pair of panels hingedly attached to the structure, wherein the panels open up when facing against the direction of movement of the liquid or gas and fold substantially closed when facing away from or sideways to the direction of movement.
- 10 2. An apparatus according to Claim 1, further comprising:
 - at least one stop for preventing the at least one pair of panels from folding back when facing the direction of movement of the liquid or gas; and
 - 15 a secondary brace for preventing the pair of panels from completely closing when facing away from or sideways to the direction of movement.
3. An apparatus according to Claim 2, further comprising:
 - an electrical generator; and
 - 20 a system for turning the electrical generator from the rotation of the shaft or structure around the shaft at a rotational speed much greater than the rotational speed of the shaft or the structure around the shaft.
- 25 4. An apparatus according to Claim 1, wherein the at least one pair of panels comprises a first two pairs of panels aligned with each other on opposite sides of the shaft and a second two pairs of panels at right angles to the first two pairs of panels, aligned with each other on opposite sides of the shaft, wherein the first two pairs of panels face in opposite directions from each

other and the second two pairs of panels face in opposite directions from each other.

5. An apparatus according to Claim 4, wherein when a pair of panels is in the open position, the panels of that pair form a concave surface facing the direction of movement of the liquid or gas.
10. An apparatus according to Claim 4, further comprising:
 - at least one stop corresponding to each of pair of panels for preventing the panels of that pair from folding back when facing the direction of movement of the liquid or gas; and
 - at least one secondary brace corresponding to each pair of panels for preventing that pair of panels from completely closing when facing away from or sideways to the direction of movement.
15. An apparatus according to Claim 6, further comprising:
 - an electrical generator; and
 - a system for turning the electrical generator from the rotation of the shaft or structure around the shaft at a rotational speed much greater than the rotational speed of the shaft or the structure around the shaft.
20. An apparatus according to Claim 2, wherein when the at least one pair of panels is in the open position, the panels of that pair form a concave surface facing the direction of movement of the liquid or gas.